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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/560,026      | 12/08/2005  | Naoki Ode            | 450100-05118        | 8331             |

7590 03/05/2010  
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| EXAMINER |
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BRYANT, DOUGLAS J.

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2195

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| MAIL DATE | DELIVERY MODE |
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03/05/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                   |  |
|------------------------------|--------------------------------------|-----------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/560,026 | <b>Applicant(s)</b><br>ODE, NAOKI |  |
|                              | <b>Examiner</b><br>DOUGLAS BRYANT    | <b>Art Unit</b><br>2195           |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 22 January 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. This office Action is in response to amendments filed on December 18, 2009.
2. Claims 1-20 are pending.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following claims language is not clearly understood:
  - i. Claim 1, line 4, and claims 6 and 11, it is not clearly defined what a “determination request” is, is it different from the task execution request?

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 6-7, 11-12, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shitahaku (Shitahaku) US 2002/0037753 A1 in view of Shitahaku\_B (Shitahaku) US 2003/0110202 A1.

6. As per claim 1, Shitahaku teaches a computer-readable conflict management program that is to be executed by a computer, the conflict management program when executed perform:

Receiving a determination request including

(a) receiving a task execution request (**Para 38, lines 1-2**);

(b) a termination notification of a currently executed task (**Para 45, lines 1-10**), and registering an active task in an active task list (**Para 38, lines 2-3**);

detecting for a task conflict, to determine whether the task which issued the task execution request can be started and whether a task waiting to be executed can started, by referencing the active task list when the determination request is received in the determination request reception step (**Para 43, lines 1-4**);

respectively placing the task designated by the determination request and the task registered in the active task list in the states determined in the determination step (**Para 44, lines 1-5**).

7. Shitahaku does not teach (c) a state transition notification of a currently executed task and determining a state to which a task registered in the active task list should switch in accordance with (a) predetermined conditions set in a conflict condition table when a task conflict is detected in the conflict detection step.

8. However, Shitahaku\_B does teaches

(c) a state transition notification of a currently executed task (**Para 31-33; table 2, when “allow” is in the column, it is able to start because there is no effective competition, this means the request is able to switch to an active state as in table 1. Its understood that a notification has been sent since the table has to update the current status notifying whether or not the task has transition to another state**);

determining the state to which a task designated by the determination request should switch and the state to which a task registered in the active task list should switch with a predetermined set conditions set in a conflict condition table when a task conflict is detected in the conflict detection step (**Para 28, lines 1-5; Para 31, lines 1-3 [see table 1 Para. 29]; Para 35 (Table 3); Para 43-44; {It is understood that the priorities are predetermined conditions that are set for each application which resides in the table}}**).

9. It would have been obvious at the time the invention was made to incorporate the teachings of Shitahaku\_B into the methods Shitahaku to have a termination notification and state transition of currently executed task e and predetermined conditions in a active task list. The modification would have been obvious because one of the ordinary skills in the art would have an active task list that would be able to acknowledge the predetermined conditions as well as the current state of each task that has conflict detection.

10. As per claim 2, Shitahaku\_B teaches the computer-readable conflict management program according to claim 1, wherein the state determination step comprises:

Art Unit: 2195

referencing, when a task conflict is detected in the conflict detection step, the conflict condition table that stores states to which conflicting tasks should switch (**Para. 32-33; see table 2**);

and determining respectively the state to which the task designated by the determination request should switch and the state to which the task registered in the active task list should switch (**Para 34-36; see table 3**).

11. As per claim 6, 11, and 16, they are rejected on the same rationale as claim 1.

12. As per claim 7, 12, and 17, they are rejected on the same rationale as claim 2.

13. Claims 3-5, 8-10, 13-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shitahaku (Shitahaku) US 2002/0037753 A1 in view of Shitahaku\_B (Shitahaku) US 2003/0110202 A1, as applied to claims 1,6,11, and 16 above, and in further view of Parkin (Parkin) US Patent 4073005.

14. As per claim 3, Shitahaku in combination with Shitahaku\_B teaches the computer-readable conflict management program according to claim 2; However they are silent to the fact of registering a task in an execution list that is within the active list and registering a task to wait to be executed within the execution list.

15. However Parkin teaches wherein the active task registration step comprises: registering the task to be executed in an execution list within the active task list (see figure 5, part 502); and

Art Unit: 2195

registering the task that should wait for execution in an execution wait list within the active task list **(see figure 5, part 502; It is understood that once the task status is set to ready it is waiting to be executed).**

16. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to incorporate the teachings of Parkin into the methods of Shitahaku and Shitahaku\_B to register a task to be executed within the active list as well as register the next task to be executed after the completion of the current task. The modification would have been obvious because on of ordinary skill of the art would have added this capability to not only increase the efficiency and convenience of the system but to also ensure the system is operating optimal capacity.

17. As per claim 4, Parkin teaches the computer-readable conflict management program according to claim 3, wherein the active task registration step comprises:

selecting the task to be executed and the task that should wait for execution in accordance with the priorities of the states determined in the determination step **(Col 15, lines 29-30; Col 2, lines 54-56);**

registering the task to be executed in the execution list **(see figure 5, part 502);** and

registering the task that should wait for execution in the execution wait list **(see figure 5, part 502; It is understood that once the task status is set to ready it is waiting to be executed).**

Art Unit: 2195

18. As per claim 5, Parkin teaches the computer-readable conflict management program according to claim 2, wherein the determination step comprises:

canceling the determination request when it is determined that the task designated by the determination request cannot be executed (**Col 15, lines 31-34**).

19. As per claim 8, 13, and 18, they are rejected on the same rationale as claim 3.

20. As per claim 9, 14, and 19, they are rejected on the same rationale as claim 4.

21. As per claim 10, 15, and 20, they are rejected on the same rationale as claim 5.

### ***Response to Arguments***

22. Applicant's arguments filed December 18, 2009, with respect to claims 1-20 have been fully considered but they are not persuasive.

23. In the remarks applicant argues:

a. Shitahaku '202 fails to teach teaches or suggests (a) receiving a determination request including a task execution request, a termination notification and a state transition notification, (b) detecting a task conflict and (c) determining the states to which the task should switch.

2. Examiner respectfully disagree to applicant.



Art Unit: 2195

b. As to point (a), Shitahaku\_B teaches in Paragraph 38 states receiving a launch instruction which is a specific type of instruction. This classifies as a particular determination which was received at the operation control section. Paragraph 45 states that a quit instruction was received informing it to terminate. It is understood that a quit instruction is also considered a terminate instruction. In order for the quit instruction to be received, a notification must have been sent out. Shitahaku teaches in Paragraph 28 that the status table includes interrupt status meaning that a notification for interrupt has been set which means the application will terminate. Shitahaku teaches in Para 31-33 the state transition. In table 2, when “allow” is in the column, it is able to start because there is no effective competition, this means the request is able to switch to an active state as in table 1. By performing this transition, it is understood that updating the current status in the table of an application of its current state from its previous state. Shitahaku\_B teaches in Paragraph 43 that it compares the priority of the application because a conflict was detected and it is using the priority (a predetermined condition) as a solution to resolving the conflict. Shitahaku\_B teaches in Paragraph 35 table 3 teaches which state the task should switch to if it is to switch.

### ***Conclusion***

1. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 2195

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS BRYANT whose telephone number is (571)270-7707. The examiner can normally be reached on M-F 8:00-5:00pm Est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, An Meng-ai can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

3. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/  
Supervisory Patent Examiner, Art Unit 2195

/DOUGLAS BRYANT/  
Examiner, Art Unit 2195